

## Natural Resources

The area of New Orleans that includes many of the properties and much of the history relating to New Orleans Jazz National Historical Park has been urban for nearly 300 years, and its natural environment has been greatly altered. New Orleans is part of the Coastal Marsh physiographic region, which includes the lowest elevations in the state. Originally, much of the New Orleans area required the construction and continued maintenance of levees and canals to permit construction of homes and buildings in this part of the lower Mississippi River valley.

### AIR QUALITY

Orleans Parish is currently meeting all national ambient emissions quality standards affecting air quality and pollution for sulfur dioxide, ozone, particulate matter, nitrogen dioxide, carbon dioxide, and lead.

### THREATENED AND ENDANGERED SPECIES

The following federally listed endangered animal species have been recorded in Orleans Parish: Bald Eagle (*Haliaeetus leucocephalus*), West Indian Manatee (*Trichechus manatus*), Gulf Sturgeon (*Acipenser oxyrinchus desotoi*), and Pallid Sturgeon (*Scaphirhynchus albus*). In addition to these, the state of Louisiana lists the following animals as rare, threatened, and endangered in Orleans Parish: Cooper's Hawk (*Accipiter cooperii*), Big Brown Bat (*Eptesicus fuscus*), Diamondback Terrapin (*Malaclemys terrapin*), and Glossy Ibis (*Plegadis falcinellus*). No critical habitat is known to occur in the park area. There are no species of plants in the park area that are federally listed or proposed for listing as endangered or threatened.

### FLOODPLAINS

The entire delta region including New Orleans lies within the natural floodplain of the Mississippi River and adjacent waterways. Federal Emergency Management Agency (FEMA) floodplain boundary maps revised in 1984 show that the entire city area is inside the boundaries of the 100- and 500-year floodplain. Riverine flooding and flooding caused by tidal changes is checked by the presence of levees and canals. Any flooding that is likely to occur in the park area would probably be due to heavy rainfall or levee damage.

### CLIMATE

New Orleans has a humid, subtropical climate that is characterized by short, mild winters and relatively long, hot summers. Winds from the Gulf of Mexico bring warm, moist air causing copious rainfall. Incursions of cold air are relatively rare and generally do not last longer than several days. Annual rainfall averages 58 inches, most of which occurs during the months of July through September. The driest months are October and November. Average daily winter temperatures range from 47° F to 66° F, with January and February being the coldest months of the year. Summer temperatures range from 72° F to 89° F and rarely exceed 100° F, with July and August the warmest months of the year.

### WATER QUALITY

Water quality in the city exceeds the standards of the Environmental Protection Agency. New Orleans adjoins several water bodies whose presence physically and perpetually impacts the park area. They consist of (1) the Mississippi River, which receives heavy industrial discharges from cities upstream, as well as from New Orleans, transports them

through the birdfoot delta, and deposits them into the Gulf of Mexico; (2) Lake Pontchartrain, a large estuarine lake, and (3) Bayou St. John, a scenic watercourse that flows from New Orleans to Lake Pontchartrain. Both of the latter bodies contain elements of pollution associated with urban occupation and development.

## **SOILS**

The soils in New Orleans developed as a result of alluvial and marine sedimentation simultaneous with the accumulation of organic material. Urban growth in New Orleans evolved over several centuries on a foundation

of organic and fluid mineral soils that are characterized by flooding, chronic wetness, and subsidence. According to Soil Conservation Service surveys of Orleans and Jefferson parishes, the soils that predominate in the area encompassing metropolitan New Orleans generally represent poorly drained and firm clayey mineral soil known as Sharkey silty clay loam, Sharkey clay, Commerce silt loam, Commerce silty clay loam, and Harlahan clay. Much of the city's downtown area consists of urban land where more than 85% of the surface is covered by asphalt, concrete, buildings, or other impervious surfaces. Most of this development is located on the natural levees of the Mississippi River.